



如何使用 PolkadotJS 与 Substrate 进行交互

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JS应用架构

Substrate WSS API

@polkadot/api

@polkadot/extension-dapp

@polkadot{.js} extension

MathWallet extension

DAPP Webpage



测试环境配置 - 本地节点

- 使用上一讲中提到的 Substrate 2.0 Node Template 跑一个本地节点
 - <https://substrate.dev/docs/en/tutorials/creating-your-first-substrate-chain/setup>
- WSS
 - <ws://127.0.0.1:9944>



测试环境配置 – 插件钱包

- 使用麦子插件钱包 v2.1.2
 - <https://medishares-cn.oss-cn-hangzhou.aliyuncs.com/extension/mathwalletplus-v2.1.2.zip>
 - 注：保持节点、插件钱包、网页钱包的版本兼容性
- 完成测试钱包的创建
 - 设置 – Network – 打开 Substrate
 - Switch Network: Substrate



测试环境配置 - 网页钱包

- <http://app2.substrate.cc/>
- 选择本地节点
- 用浏览器插件的test账号测试一笔转账



Sample 1：链信息查询

- 安装 Node 和 Yarn 环境
- 执行 `yarn` 安装依赖库
- `node basic_connect_local.js`
- `node display_data.js`
- `node read_account.js`
- `node tx.js`
- `node test.js`

<https://github.com/ericfish/Substrate-Dev-Book/tree/master/00-connect>



Sample 2 : 画布应用

- 配置画布应用
 - <http://blog.boka.network/2020/02/29/subtrate-xue-xi-bi-ji-ben-de-pei-zhi-substrate-20/>
- 测试画布应用
- 开发与插件钱包交互的优化版本
 - <http://blog.boka.network/2020/03/30/polkadotjs-kai-fa-jiao-cheng-shi-xian-substrate-h/>
 - <https://github.com/ericfish/Substrate-Dev-Book/tree/master/01-remarks-ui>





Sample 3 : 查询交易记录

- 订阅Events
- 遍历Block
- <http://blog.boka.network/2020/03/30/polkadotjs-kai-fa-jiao-cheng-cha-xun-jiao-yi-ji-l/>
- <https://github.com/ericfish/Substrate-Dev-Book/tree/master/02-tx-history>



TIPS

- <https://apiexplorer.polkalert.com/>


Switch Node
Explore API
Contact
Made by 

getChildStorageHash(childStorageKey, childDefinition, childType, key, at)

Retrieves the child storage hash

api > rpc > state > getChildStorageHash (api.rpc.state.getChildStorageHash)

Can be tested?

✓ Is not signed

✓ Is not a subscription

Return type

Hash

Params

childStorageKey: StorageKey Required!

childDefinition: StorageKey Required!

childType: u32 Required!

key: StorageKey Required!

at: BlockHash Optional

Test result

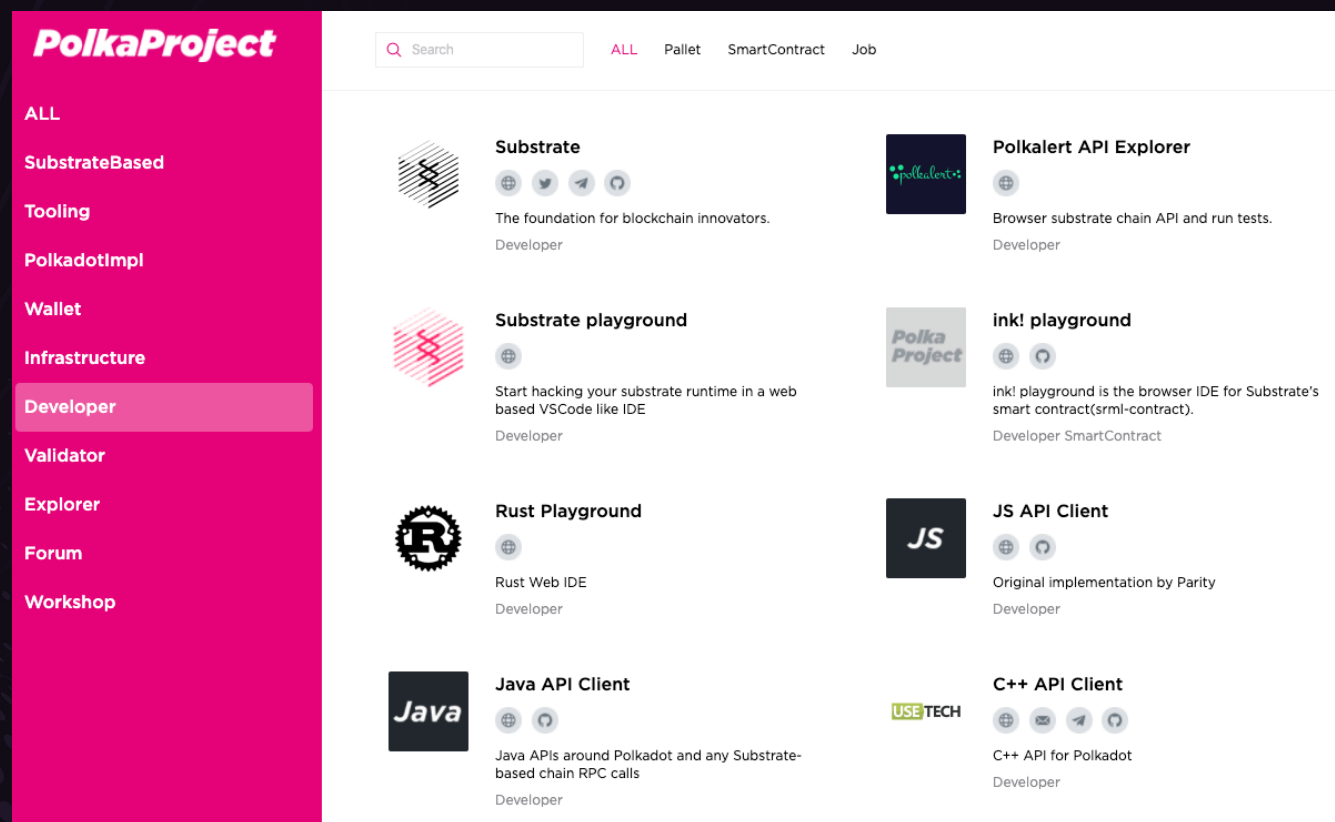
Fill out the required params and click the "Run test" button.

RESET

Run test

TIPS


- <http://www.polkaproject.com/>





PolkaProject


ALL
SubstrateBased
Tooling
PolkadotImpl
Wallet
Infrastructure
Developer
Validator
Explorer
Forum
Workshop


Search ALL Pallet SmartContract Job


**Substrate**
The foundation for blockchain innovators.
Developer


**PolkaAlert API Explorer**
Browser substrate chain API and run tests.
Developer


**Substrate playground**
Start hacking your substrate runtime in a web based VSCode like IDE
Developer

**ink! playground**
ink! playground is the browser IDE for Substrate's smart contract(srml-contract).
Developer SmartContract

**Rust Playground**
Rust Web IDE
Developer

**JS API Client**
Original implementation by Parity
Developer

**Java API Client**
Java APIs around Polkadot and any Substrate-based chain RPC calls
Developer

**C++ API Client**
C++ API for Polkadot
Developer




相关代码

- <https://github.com/ericfish/Substrate-Dev-Book>



Thanks

Boka.Network

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